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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,630	07/27/2001	Steve C. Johnson	H0002135	9510

25315 7590 07/25/2006

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EXAMINER

NGUYEN, PHUNG

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

51

Office Action Summary**Application No.**

09/916,630

Applicant(s)

JOHNSON ET AL.

Examiner

Phung T. Nguyen

Art Unit

2612

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Muller et al. (U.S. Pat. 5,839,080).

Regarding claim 1: Muller et al. disclose a terrain awareness system which comprises providing a terrain database; receiving a positional fix; determining a database resolution at the positional fix; receiving a ground track; generating a look-ahead envelope based on the received positional fix, data base resolution, and the received heading (col. 4, lines 59-67, and col. 5, lines 1-6).

Regarding claim 2: Muller et al. disclose the positional fix including a positional uncertainty value (col. 26, lines 65-67, and col. 27, lines 1-2).

Regarding claim 3: Muller et al. disclose the detection offset based on the value for positional uncertainty (col. 26, lines 65-67, and col. 27, lines 1-2).

Regarding claim 4: Muller et al. disclose a series of detection sub-offset based on the value for positional uncertainty (col. 27, lines 2-15).

Regarding claim 5: Muller et al. disclose the positional fix including a distance to nearest runway value (col. 6, lines 40-48).

Regarding claim 6: Muller et al. disclose a side span value based on the distance to nearest runway (col. 6, lines 40-47, and col. 27, lines 13-15).

Art Unit: 2612

Regarding claim 7: Muller et al. disclose receiving a logical signal indicating a low-altitude flight condition (col. 10, lines 11-22).

Regarding claim 8: Muller et al. disclose a side span value based upon the presence of the logical signal indicating a low-altitude flight condition (col. 10, lines 11-13).

Regarding claim 9: Refer to claim 8 above.

Regarding claim 10: Muller et al. disclose a series of detection sub-offsets based upon the presence of data base high-resolution (col. 6, lines 40-48). Plus the consideration of claim 4 above.

Regarding claim 11: All the claimed subject matter is already discussed in respect to claims 1, 3, and 6 above.

Regarding claim 12: Refer to claim 2 above.

Regarding claim 13: Refer to claim 3 above.

Regarding claim 14: Refer to claim 7 above.

Regarding claim 15: Refer to claim 8 above.

Regarding claim 16: Refer to claim 4 above. Muller et al. also disclose indicating low-altitude flight condition (col. 10, lines 24-35).

Regarding claim 17: All the claimed subject matter is already discussed in respect to claim 11 above. Muller et al. also disclose a heading received from the means for conveying data (col. 27, lines 65-67, and col. 28, lines 1-28).

Regarding claim 18: Muller et al. disclose a look-ahead envelope bases that envelope upon a measure of positional uncertainty received from the means for conveying data (col. 26, lines 60-67, and col. 27, lines 1-2).

Art Unit: 2612

Regarding claim 19: Muller et al. disclose a look-ahead envelope bases that envelope upon a logical signal indicating a low-altitude flight condition received from the means for conveying data (col. 10, lines 11-36).

Regarding claim 20: Muller et al. disclose a register in the form of RAM A for receiving navigation data comprising a database component including stored elevations of terrain stored in association with a terrain location (col. 23, lines 5-20) and an alert component configured to determined if an alert condition exists based on the generated look-ahead envelope (col. 11, lines 14-32). Plus the consideration of claim 1 above.

Regarding claim 21: Muller et al. disclose generating the look-ahead envelope defined by a detection offset value (col. 26, lines 65-67, and col. 27, lines 1-2).

Regarding claim 22: Muller et al. disclose the register is configured to receive a positional uncertainty value (col. 26, lines 56-67, and col. 27, lines 1-5).

Regarding claim 23: Muller et al. disclose generating the detection offset value based upon the logical signal indicating low-altitude flight (col. 10, lines 11-17, and col. 27, lines 2-15).

Regarding claim 24: Muller et al. disclose the look-ahead envelope is defined by a side span value (col. 27, lines 2-15).

Regarding claim 25: Refer to claim 8 above.

Regarding claim 26: Muller et al. disclose the look-ahead component generates a side span value (col. 26, lines 65-67, and col. 27, lines 1-15).

Regarding claim 27: Muller et al. disclose comparing stored locations of runways to an aircraft instantaneous position, selecting a nearest runway, and calculating

Art Unit: 2612

the distance to the nearest runway value (col. 2, lines 40-50, and col. 10, lines 11-22).

Plus the consideration of claim 6 above.

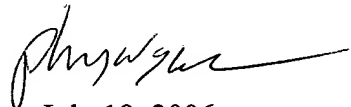
Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung T Nguyen whose telephone number is 571-272-2968. The examiner can normally be reached on 8:00am-5:30pm Mon thru. Friday, with alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu can be reached on 571-272-2964. The fax numbers for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Phung Nguyen

A handwritten signature in black ink, appearing to read 'Phung Nguyen', with a long horizontal flourish extending to the right.

Date: July 19, 2006